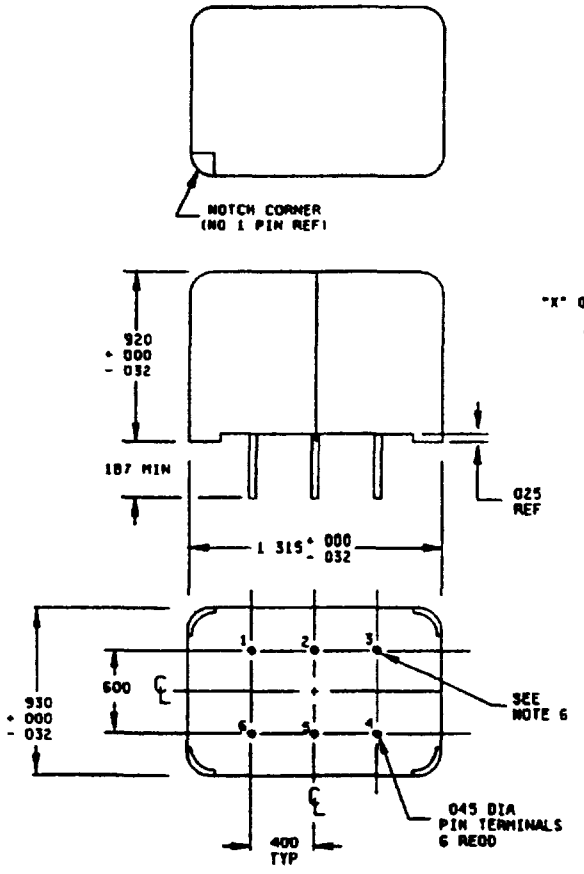
INCH-POUND
MIL-T-27/247C
3 August 1993
SUPERSEDING
MIL-T-27/247B
25 March 1980

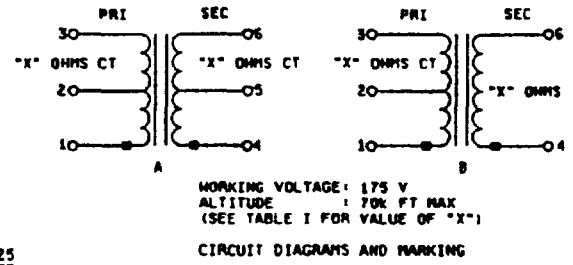
MILITARY SPECIFICATION SHEET

TRANSFORMERS AND INDUCTORS (AUDIO, POWER AND HIGH-POWER PULSE), TRANSFORMER, AUDIO FREQUENCY, TF4R21AJ316

This specification is approved for use by all Departments and Agencies of the Department of Defense

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-T-27.





Inches	mm
.025	0.64
.032	0.81
.045	1.14
.187	4.75
.400	10.16
.600	15.24
.920	23.37
.930	23.62
1.315	33.40

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is ±.010 inch (0.25 mm)
4. Marking shall be on the sides and/or top of case.
5. Electrical values shall be marked as specified in table I, as applicable.
6. Terminal numbers for reference only, not to be marked on unit.

FIGURE 1. Dimensions and configurations

© denotes changes

REQUIREMENTS: (When numbers in parentheses, i.e., (1-2) are used, they indicate the winding and the extreme terminals of the windings.)

Electrical ratings See table I.

Frequency range 200 Hz to 10 kHz

Power level: 2 watts, maximum at 200 Hz.

TABLE I Electrical ratings.

Dash no	Circuit diagram	Primary impedance (1-3) ohms	Secondary impedance (4-6) ohms	Primary DCR (1-3) ohms +20%	Secondary DCR (4-6) ohms +20%	Primary unbalanced dc current mA max
02	A	10 0 k CT	10.0 k CT	700	1,000.00	1.5
03	A	10 0 k CT	1.5 k CT	700	150.00	1.5
04	A	10 0 k CT	600.0 CT	700	60.00	1 5
05	B	10 0 k CT	3.2	700	0.37	1.5
06	A	1.5 k CT	600.0 CT	105	60 00	4 0
07	A	1.0 k CT	600.0 CT	69	60.00	4.5
08	A	600.0 CT	600 0 CT	43	60.00	6.0
09	A	600.0 CT	250 0 CT	43	24 00	6.0
10	A	600.0 CT	150.0 CT	43	15.00	6 0
11	B	600 0 CT	3.2	43	0.37	6 0

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case Encapsulated.

Material Plastic

Terminals: Pin (printed circuit).

Material: Brass, tin-plated.

Diameter. .045 inch ±.005

Length 187 inch, maximum

Weight: .10 pound.

Altitude: 70,000 feet, maximum.

Operating temperature range. -55°C to +130°C.

Salt spray (corrosion): MIL-STD-202, method 101, test condition B.

Terminal strength: MIL-STD-202, method 211, test condition A, 2 pounds

Dielectric withstanding voltage

At sea level: 500 volts rms.

At reduced barometric pressure 300 volts rms

Electrical characteristics See table II.

Frequency response:

Reference frequency: 1 kHz.

Polarity Additive, with terminals 1 and 4 connected

TABLE II. Electrical characteristics

Dash no.	Frequency response at 200 Hz to 10 kHz ±1.0 dB			
	Z_S (1-3) ohms	Z_L (4-6) ohms	E_{pri} volts	Primary dc current (1-3) mA
02	10.0 k	10.0 k	70.7	0 75
03	10.0 k	1.5 k	70.7	0 75
04	10 0 k	600.0	70 7	0 75
05	10.0 k	3.2	70 7	0 75
06	1.5 k	600.0	27 4	2.00
07	1.0 k	600.0	22 4	2.25
08	600 0	600.0	17.3	3.00
09	600.0	250.0	17.3	3.00
10	600.0	150.0	17 3	3 00
11	600.0	3 2	17 3	3 00

Marking location: See figure 1.

Part or Identifying Number (PIN) M27/247-(dash number from table I)

(C) Qualification. Not applicable for this specification sheet

(C) Substitution data: M27/247-(and dash no from table I) is substitutable for CAGE 70674, PIN 330-(and dash no from table I). This in no way implies that the manufacturer's part is substitutable for the military item.

CONCLUDING MATERIAL

Custodians:
Army - ER
Navy - EC
Air Force - 85

Review activities:
Army - AR
Navy - OS, SH
Air Force - 17, 99
DLA - ES

User activities:
Army - ME
Navy - AS, MC
Air Force - 19

Preparing activity:
Army - ER

Agent:
DLA - ES

(Project 5950-0823)